PROMOTING HEALTH WITH FEMALE YOUTH LIVING ON
SIX NATIONS RESERVE NO. 40.
CORNHUSK DOLL WORKSHOP: PROMOTING HEALTH WITH FEMALE YOUTH LIVING ON SIX NATIONS RESERVE NO. 40.

By RACHEL BOMBERRY, RPN. B.Sc.N

A Thesis Submitted to the School of Graduate Studies in Partial Fulfillment of the Requirements for the Degree Master of Public Health

McMaster University © Copyright by Rachel Bomberry, September 2018
TITLE: Cornhusk Doll Workshop: Promoting Health With Female Youth Living on Six Nations Reserve No. 40 AUTHOR: Rachel Bomberry, RPN, B.Sc.N (McMaster University) SUPERVISOR: Dr. Chelsea Gabel NUMBER OF PAGES: 76
ABSTRACT

Involving Indigenous youth in health promotion research within the broader field of public health allows us to investigate health literacy, while promoting, protecting, and combating complex health issues. This project uses a community-engaged research approach, as well as a research workshop methodology and draws on qualitative methods to answer the following study objectives: (1) To what extent do female youth living on Six Nations Reserve No. 40 understand and engage in health promotion; (2) In what ways did a cornhusk doll workshop engage and strengthen female youth understanding on the topic of health promotion; and (3) What resources are necessary for female youth to successfully engage in health promotion. Findings were grouped into three main themes: Healthy Development, Healthy Relationships, and Healthy Policies.
ACKNOWLEDGEMENTS

I would like to acknowledge all the contributions in this research, including Elizabeth Doxtater for her continued guidance throughout the project; Louise Hill and her son Scott Hill, Tom Deer, Dallas Squire, Dr. Rick Hill, and my external reviewer Dr. Susan M. Hill for contributing their knowledge to the workshop; my supervisor Dr. Chelsea Gabel and committee members Dr. Saara Greene and Danielle Soucy for supporting me throughout my research journey. All of these amazing people shared their knowledge, insights and experiences to support me in my research journey to promote health with female youth living on the land Six Nations of the Grand River Territory.
# TABLE OF CONTENTS

## CHAPTER 1: OVERVIEW

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Layout of Thesis</td>
<td>2</td>
</tr>
<tr>
<td>Becoming a Researcher</td>
<td>3</td>
</tr>
<tr>
<td>My Nursing Lens</td>
<td>7</td>
</tr>
<tr>
<td>Explaining the Title</td>
<td>9</td>
</tr>
<tr>
<td>A Note Regarding Language</td>
<td>10</td>
</tr>
<tr>
<td>Historical Context</td>
<td>14</td>
</tr>
<tr>
<td>Situating The Research</td>
<td>15</td>
</tr>
<tr>
<td>Social Determinants of Health</td>
<td>18</td>
</tr>
</tbody>
</table>

## CHAPTER 2: LITERATURE REVIEW

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search Strategy</td>
<td>22</td>
</tr>
<tr>
<td>Indigenous Canadian First Nations Youth (IC/FN) Health</td>
<td>23</td>
</tr>
<tr>
<td>Engagement in Health</td>
<td>26</td>
</tr>
<tr>
<td>Health Promotion Interventions</td>
<td>28</td>
</tr>
<tr>
<td>Youth involvement in Health Research</td>
<td>30</td>
</tr>
<tr>
<td>Gaps in Literature</td>
<td>31</td>
</tr>
<tr>
<td>Research Questions</td>
<td>33</td>
</tr>
</tbody>
</table>

## CHAPTER 3: STUDY DESIGN

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>33</td>
</tr>
<tr>
<td>Methodology</td>
<td>34</td>
</tr>
<tr>
<td>Methods</td>
<td>39</td>
</tr>
<tr>
<td>Ethical Approval</td>
<td>44</td>
</tr>
<tr>
<td>Participants</td>
<td>47</td>
</tr>
<tr>
<td>Sample Size</td>
<td>47</td>
</tr>
<tr>
<td>Recruitment</td>
<td>48</td>
</tr>
<tr>
<td>Setting</td>
<td>48</td>
</tr>
<tr>
<td>Data Collection</td>
<td>49</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>50</td>
</tr>
</tbody>
</table>

## CHAPTER 4: ENDVIEW

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Development</td>
<td>52</td>
</tr>
<tr>
<td>Healthy Relationships</td>
<td>55</td>
</tr>
<tr>
<td>Healthy Policies</td>
<td>58</td>
</tr>
<tr>
<td>Recommendations</td>
<td>61</td>
</tr>
<tr>
<td>Limitations</td>
<td>63</td>
</tr>
<tr>
<td>Final Reflection</td>
<td>63</td>
</tr>
</tbody>
</table>

## REFERENCES


CHAPTER 1: OVERVIEW

Introduction

Indigenous youth in Canada struggle to navigate adolescence, and consequently colonization questions their sense of belonging. Youth specifically living on-reserves unknowingly conceive stress from intergenerational trauma, along with culture collision, and ongoing systemic barriers. Indigenous youth are five to six times more likely to die by suicide, end up in institutions, and less likely to graduate high school. By understanding how to promote Indigenous youth’s health and self-worth within community relationships has the potential to enhance individual health success. This research study employs a community engaged research methodology that examines how female youth living on Six Nations Reserve No. 40 understand health and engage in health promoting services in their community. Data was collected through a number of Indigenous and non-Indigenous research methods, including the facilitation of a cornhusk doll workshop, a sharing circle and two anonymous open-ended surveys.

The Six Nations Reserve serves as the most largely populated and most diverse First Nations community in Canada. Upon a review of the literature, a clear gap was revealed suggesting that the voices of youth under the age of sixteen, and their knowledge of health and how youth address their health concerns was absent. This thesis takes a strength based approach and explores the possibilities of health promotion in efforts to address health needs through the empowerment of individuals and communities in an effort to gain awareness and action leading to positive youth health outcomes. This prompted me to go to the source and generate discussions of health knowledge with
health promoters, knowledge holders and most importantly youth themselves within my community.

Growing up on the Six Nations Reserve, the prominence of women was evident in my everyday life. Thus, this research project attempts to foster the next generation of women to promote health and address important health issues in my community. The goal of this research is three-fold: (1) To understand the extent to which female youth living on Six Nations Reserve No. 40 understand and engage in health promotion; (2) To conduct a cornhusk doll workshop as a way to engage and strengthen female youth understanding on the topic of health promotion; and (3) To explore possible resources for female youth to successfully engage in health promotion. By understanding community relationships, strengths and supports, individual health success has the ability to strengthen positive health outcomes. I am thankful for having the opportunity to conduct research with youth in my own community, and I am sincerely grateful for the youth who have shared their perspective for health equity and cultural revitalization. It is my hope this knowledge will lead to the development of innovative research approaches and public health programs that will drive equity and enhance health promotion with Indigenous youth across this country.

**Layout of Thesis**

First, I will begin this thesis by reflecting on my own personal journey, followed by my experience, background, and lens as a nurse. Second, I will explain the title and provide a note regarding language of key terms that are symbolic to me as an Indigenous member of Canada and researcher. Third, I discuss the historical context and situate the
research by exploring health promotion in the broader field of public health. In chapter two, I provide a literature review on what is known about Indigenous youth engagement in health promotion. Chapter three outlines the methodological approach, i.e., a community engaged research approach that drew on a research workshop, as well as qualitative methods that were used to collect and analyze the data. In chapter four, I discuss results and present themes that resulted from the data, and provide recommendations. I conclude this thesis by discussing the limitations of the present study, followed by a final reflection.

**Becoming a Researcher**

The name I received is Yenorahawi's and translates in the Mohawk language to ‘She Carries The Husk’. I am Grand River Mohawk and growing up on the Six Nations Reserve I learned the foundation of my beliefs such as the importance of peace, respect, responsibility, righteousness and caring for one another. My family instilled the values of education at an early age. By age two, I was in daycare on the reserve and this was the beginning of my early childhood education. I attended Jamieson Elementary School from kindergarten to grade six, followed by completing grades seven and eight at J.C Hill Elementary School, both located in the village of Ohsweken on Six Nations Reserve. Then, I chose to attend and commute to a Catholic High School in Brantford, Ontario. During my time as a high school student I experienced a life changing accident that I believe led me to become a nurse. It is my positive experiences attending these schools that I owe my gratitude of setting a strong foundation of institutional knowledge.
My mother was born to hard working parents who both farmed and worked tobacco within the Grand River Territory. My mother was born at the Lady Willingdon Hospital, which was located in the village of Ohsweken, Ontario. She is the second youngest of nine children and was the only one in her household to attend college. To quote my mother, “My father was my driving force to be successful. He told me to get an education and that stuck with me after he passed on”. My mother attended Niagara College, then transferred and graduated from Fanshawe College with a part time position at the Brantford General Hospital. When my older brother was three months old she secured a full time position at the hospital and chose to commute from the reserve to Brantford for the past thirty-one years.

My mother enrolled me at Jamieson Elementary School for my primary education. My favourite subject was gym class for two reasons. The first being, the school is so small it didn’t have a gym and we would walk outside to the big school next door and use their gym. The second reason is my love for sport and my competitive nature. The Cayuga language was my second favourite subject. As I look back, I am not sure if it was the teacher or the language that sparked my spirit more. Jamieson is one of five federally funded elementary schools on the reserve. During my time at Jamieson, my greatest achievements were receiving the citizenship award, Cayuga language award, math award, and attendance awards. Jamieson elementary also provided me with the opportunity to participate in extra curricular activities including hockey, baseball, soccer, badminton, and I was awarded the top female track and field athlete award. My relationship with Jamieson Elementary will always be dear.
J.C Hill School was traditionally a place for all students in grade seven and eight to congregate on the reserve. It was here where I first learned how to type on a computer and the basics of the French language. Transitioning from traditional elementary to junior high on the reserve is more than just a milestone. A lot of our grandparents, and great grandparents never had the opportunity to attend school past grade six. For me, junior high created some of my most fond memories. As with any youth, my previous relationships dwindled or strengthened, and new ones were formed as I had the opportunity to meet youth from across the reserve. Academic success also followed me to J.C Hill School as I was an honor student, and received the French language, computers, and citizenship awards. My extracurricular activities provided me with many social opportunities such as basketball, badminton, soccer, hockey, and cross-country. I will never forget my grade eight graduation and I always cherish the memories formed with peers and teachers.

I was not prepared for the culture shock that I experienced entering grade nine at Assumption College School, along with my feelings of fear and not knowing if I was going to be the only student from the reserve. Growing up on the reserve, we have the choice to attend one of nine surrounding secondary schools. I chose to attend Assumption College School for high school because I believed wearing a uniform would provide me with a sense of belonging and would be less stressful. I played on the school basketball, lacrosse, and hockey teams throughout my high school tenure. I was an academic honours student my freshman year.
During my sophomore year in high school, tragedy struck when my mother and I were in a fatal and life changing car accident. I was going from one hockey practice in Brantford to a second practice in Simcoe the same night. The phenomenal care I received at McMaster Children’s Hospital inspired me to become a nurse. When I was discharged we moved into my grandmother’s house so she could help care for us. I was on bed rest and missed a few months of school. It was during this time I decided I wanted to live and would work towards becoming a nurse.

Having been exposed to health care at a young age had great influence on my post-secondary education. I started my nursing journey by taking the pre-health diploma program at Mohawk College in Brantford. Moving onto being accepted and completing the Registered Practical Nursing with Aboriginal Communities diploma program offered at Six Nations Polytechnic campus and Mohawk College’s Institute for Applied Health Sciences, located at McMaster University in Hamilton. During this time, I became a mother to my firstborn. I believe my son motivated me to continue in academics. I was accepted into the RPN to Bachelors of Science in Nursing (BScN) Six Nations program in partnership with Mohawk College and McMaster University. At this point my daughter was born. My final clinical placement at McMaster Children’s Pediatric Intensive Care unit, directed my interest to the pediatric population. I identified gaps in the ethical dimensions that address cultural interactions in health-care delivery and policies within the health care system further motivating my drive for a degree that enabled me to expertly address these gaps. I opportunistically applied to McMaster’s Indigenous Undergraduate Summer Research Scholars program; as I knew it would better prepare me
for the Master of Public Health program at McMaster. I was accepted, and this was the key component of my research journey, as I soon realized research could have a positive impact on my people.

My Nursing Lens

As a graduate of Mohawk College and McMaster University nursing programs, I gained knowledge, skills, education and mentorship opportunities that geared me towards exploring the ways multiple health determinants converge and impact the health status of Indigenous peoples. Most importantly, nursing addressed an unknown language barrier within myself and has given me insight into the health care system. The BScN program has taught effective search and analysis strategies for gathering evidence-based literature for quality information. I believe I have the ability to critically explore and analyze concepts of health and managing health from both an Indigenous and Western perspective.

Being a nurse both professionally and as a student opened my eyes to being a more positive, centered and caring parent, mother, wife and woman. As a nurse, I feel I garnered the skills and have the ability to promote healthy change in my community. Nursing introduced me to the ways in which the social determinants of health individually and collectively affect the health and wellbeing of individuals, families, communities and populations. Furthermore, acknowledging the necessity that nursing science had to be combined with knowledge from other fields such as public health, primary health care, and social sciences in order to promote, protect and preserve the health of Indigenous people. Having had great clinical placements in surrounding communities such as
Brantford, Hamilton, Hagersville, and Burlington. I then began to embrace nursing in a community setting.

Gaining experience as a community-nurse providing care for pediatric patients with complex health needs, confirmed the importance of health promotion within the broader field of public health. This is especially important on First Nation reserves where health services are limited and nurses are key liaisons in ensuring access to care, and awareness of health or safety issues within communities. Recognizing Western knowledge could be utilized to further promote health for youth living in the reserve system. At this time, I developed a keen interest in health promotion because I knew within this field I would gain effective tools to create positive changes in my community. It is my hope that by sharing my story, that Indigenous people will soon realize the importance of health and education, not only furthering our self worth and providing a better life for our future generations but for helping us to be stronger as a nation in the fight for rights.

Nursing enabled the combination of education and sport to continue in my life at both Mohawk College and McMaster University. At Mohawk, I was awarded the Ontario Collegiate Athletic Association All Academic Award. As a Mountaineer I experienced great coaching and was able to play catcher, pitcher, shortstop, third base, and hit a home run, while my children played and witnessed at the playgrounds. As a Marauder my most cherished moment will be winning the Ontario Intercollegiate Women’s Fast Pitch Association bronze medal.
Explaining the title

My research study is titled, “Cornhusk Doll Workshop: Promoting Health with Female Youth Living on Six Nations Reserve No. 40”. My title reflects and embraces the uniqueness of the reserve system while capturing the importance of health research. I challenged myself with understanding the health of my community, which led me to focus on health promotion. The World Health Organization (1986) defines health promotion as “the process of empowering people to increase control over their health and its determinants, and motivating them to become better self-managers”. I then challenged myself with impact. This led me to female youth as I derive from an ancient matrilineal society and thus choose to engage solely with youth. Next, my challenge was to engage effectively. Along with a local cornhusk artist, I created a cornhusk doll workshop as a method that would help empower the youth in the research process while gauging their knowledge of health. Lastly, in the current literature, the term reserve refers to rural and isolated communities. The uniqueness of the Federal Reserve System should be embraced and recognized as opposed to suppressed. This allotted towards a strength-based health promotion approach that embraces the knowledge, literacy, strengths and skills on Six Nations Reserve No. 40 (Hyett, Marjerrison & Gabel, 2018). Furthermore, community-engaged research community implies bringing a group of people with a common interest and shared expectations, values, and beliefs to work on an issue that has significance and meaning for them (Etmanski et al, 2014; Christopher et al, 2008; Flicker et al, 2008). However, it is important to note that I live on a reserve that depicts a community picture
of a traditional matrilineal communal society with six distinct people from six distinct places, whom live in unity and respect with each other.

**A Note Regarding Language**

**First Nations:** The term Registered Indian refers to those First Nation individuals who are registered with the federal government as Indians, according to the terms of the Indian Act. First Nations is a general term to describe a community or communities that have similar identifiers (i.e. land – reserve; culture, language, traditions, history). Indigenous and Northern Affairs Canada, 2014).

**Indian:** The term “Indian” is the legal identity of an Indigenous person who is registered under the Indian Act (Indigenous and Northern Affairs Canada, 2014).

**Indigenous:** The Martinez Cobo Study provided the most widely cited “working definition” of Indigenous peoples: Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal system.

It also notes that an Indigenous person is one who belongs to these Indigenous populations through self-identification as Indigenous (group consciousness) and is
recognized and accepted by these populations as one of its members (acceptance by the group). This preserves for these communities the sovereign right and power to decide who belongs to them, without external interference. (Martinez Cobo, 1986: para. 379)

**Indigenous Community:** The term refers to a collective group of Indigenous peoples. According to the TCPS2, a community can refer to a territory, organization or community of interest (Canadian Institutes of Health Research [CIHR] et al., 2014).

Growing up on such a populated reserve I find this definition contradicting. I believe I struggle to find commonalities on a large scale such as morals, values and beliefs within my community. As we originally are six distinct people from six distinct places. The implementation of the Crown Reserve system is an example of a systemic barrier, and used to disrupt and influence the social determinants of health. I hope my work will create unity, peace, and prosperity for our future generations. For this study I refer to “community” as youth that self-identify they’ve currently and majorly lived on the Six Nations Reserve No. 40.

**Indigenous Health Research (IHR):** The term can be defined by any field or discipline related to health and/or wellness that is conducted by, grounded in, or engaged with, First Nations, Inuit or Métis communities, societies or individuals and their wisdom, cultures, experiences or knowledge systems, as expressed in their context and history (Canadian Institutes of Health Research et al., 2014b).

**Inuit:** Inuit are a circumpolar people who live primarily in four regions of Canada: the Nunavut territory, Nunavik, Nunatsiavut and the Inuvialuit Settlement Region (Library of Parliament, 2015).
**Métis:** Métis in Canada have a unique combination of identity, values, language, and cultural traditions that distinguish them from the other two Indigenous groups of Canada, (First Nations and Inuit). Métis is “a person who self-identifies as Métis, is distinct from other Indigenous peoples in Canada, is of historic Métis Nation ancestry, and is accepted by the Métis Nation” (Métis National Council, 2011).

**Six Nations Reserve No. 40:** Largest populated reserve in Canada, with a total population of approximately 27,276 band members, 12,848 of whom live on the reserve located in the province of Ontario (Six Nations Council, 2017). Six Nations Reserve is southwest of Hamilton, Ontario and surrounded by the communities of Brantford, Caledonia, Hagersville and Mississauga’s of the New Credit First Nation. Descendants are primarily from the distinct Nations of Mohawk and Cayuga who migrated to Upper Canada following the American Revolution in 1784 (Monture, 2014). Along with members of the Oneida, Onondaga, Seneca, and Tuscarora Nations, who settled and continue to live in Six Nations today.

The settlement and Crown grant of the reserve today remains in the hands of the people of the Six Nations Grand River Territory. They settled on a tract of land granted by the Haldimand Proclamation of 1784:

> “Whereas His Majesty having been pleased to direct that in Consideration of the early Attachment to His Cause manifested by the Mohawk Indians, & of the Loss of their Settlement they thereby sustained that a Convenient Tract of Land under His Protection and should be chosen as a Safe and Comfortable Retreat for them & others of the Six Nations who have either lost their Settlements within the Territory of the American States, or wish to retire from them to the British - I have, at the earnest Desire of many of these His Majesty’s faithfull Allies purchased a Tract of Land, from the Indians situated between the Lakes Ontario, Erie, & Huron and I do hereby in His Majesty’s name authorize and permit the said Mohawk Nation, and such other of the Six Nation Indians as
wish to settle in that Quarter to take Possession of, & Settle upon the Banks of the River commonly called Ours or Grand River, running into Lake Erie, allotting to them for that Purpose Six Miles deep from each side of the River beginning at Lake Erie, & extending in that Proportion to the Head of the said River, which them & their Posterity are to enjoy forever.”

(Haldimand [1784a] 1964, 50-51).

Grand River Six Distinct Nations

Kanyen’kehá:ka (Mohawk) – People of the Flint. Originally located in Mohawk Valley, Upstate New York, they are known as the ‘Keepers of the Eastern Door.

Onenyo’te’á:ka (Oneida) - People of the Standing Stone. Their territory was to the west of the Mohawks in Upstate New York.

Ononta’kehá:ka (Onondaga)- People of the Hills/Mountain. Their territory is located in the centre between the Oneida and Cayuga territories, and also called the ‘Keepers of the Fire.’

Kayonkehá:ka (Cayuga)- People of the Great Swamp. Originally located in the Finger Lakes area of Upstate New York, and called ‘People of the Pipe.’

Shotinontowane’á:ka’n (Seneca) ‘People of the Great Hill,’ also called ‘Keepers of the Western Door’ because of their western location among the territories.

Tehatskaró:ren (Tuscarora) - Hemp Gatherers,’ also known as ‘Wearers of the Shirt.’ Joined the Iroquois Confederacy of Five Nations in 1722.

Indigenous Canadian/ First Nations (IC/FN)

In this research study, the acronym IC/FN refers to Indigenous Canadian/ First Nations in an attempt to include all relevant literature. An early attempt to assimilate the
Original people on Turtle Island was blanket terms such as Indian, Aboriginal, Native American, North American Indian, American Indian, and more recently Indigenous. These identities come with colonization and as we seek a way forward I feel it is important for people to identify with their distinct tribes and/or nationhood.

**Historical Health Context for IC/FN Reserves**

Indigenous people living on reserves in Canada struggle to navigate mainstream Western lifestyle due to imposed colonial policy notably the Indian Act of 1876. The systemic barriers within both provincial and federal health care systems complexes the access and use of health services. In Ontario, access to hospitals and health care is available to all, including Indigenous people living on reserves. Health care on reserves is funded through the federal government that includes primary health services and programs (Health Canada, 2018). Federal policy makers and health professionals have developed health policies for Indigenous people living on reserves in Canada with little to no lived experience.

Health policy researchers Gabel, and colleagues (2017) identified three key changes in Indigenous Canadian health policy, which displays an increase in Indigenous control over community health services. Beginning in 1988 the Health Transfer Policy (HTP) depicts which First Nations reserves gained control of administrating community programs through relationships with the federal government (Wigmore & Conn, 2003; Health Canada, 2018). The second health policy shift occurred in 1994, when Ontario created the Aboriginal Healing and Wellness Strategy in response to high levels of family
violence and low health status among Indigenous people (Gabel, DeMaio, & Powell, 2017; Ministry of Community and Social Services, 2012). The third shift occurred with the First Nations Health Authority (FHNA) in 2011, when British Columbia made the Tripartite Partnership Agreement (TPA) on First Nations Health Governance (Health Canada, 2003). British Columbia is the only province allowing First Nations to be accountable for their own health authority by assuming the delivery of health services and programs once delivered by Health Canada’s First Nations Inuit Health Branch - Pacific Region. The Truth and Reconciliation Commission [TRC] also made several health-related recommendations, recognizing the unknown impact of Canadian policies that has resulted in poor health outcomes and poor relationships with health care professionals and services (TRC, 2015).

**Situating The Research: Health Promotion in the Broader Field of Public Health**

This research study is located within the broader field of public health, and is driven by the Ottawa Charter’s continuous goal to innovate health services towards health promotion and Canada’s TRC Calls to Action. The World Health Organization [WHO] set precedent with health promotion using the Ottawa Charter Health Promotion framework. The Health Promotion Framework guides this research and overarching goal, which is to successfully allot resources with health services on FN reserves and to “protect from disease, and take into consideration all the determinants of health” (WHO, 1986). This framework may also strengthen the current public health services on reserves
and feasibility of community engagement with the female youth population of interest in this study.

Health promotion is defined as the “process of enabling people to increase control over, and to improve their health” (WHO, 1986), and supports resources aimed at improving the health of individuals and communities (RNAO, 2010). The WHO (1986) noted that participation and public engagement is essential to sustain health promotion action, and identified six key strategies for health promotion: 1) building healthy public policy; 2) creating supportive environments; 3) strengthening community action; 4) developing personal skills; 5) reorienting health services; and 6) moving forward.

Building healthy public policy occurs foremost through the processes that shape agendas (Buse, Mays, & Walt, 2005). In politics, an agenda is the changing list of subjects that individuals within and outside of governance are giving attention to (Kingdon, 2003). Policies are beginning to be introduced on some reserves through a bottom-up approach, for example, consulting youth voice, frontline workers, evidence-based research, health departments, organizations, and up to all levels and sectors of governance before proceeding to make resource improvements (Bailey, 2018).

Creating supportive and positive environments is established by addressing environmental barriers closely linked to health where people live, work, learn, and play (WHO, 1986). A prominent health promotion intervention used by nurses is health education activities such as RNAO’s (2010) ‘Enhancing Healthy Adolescent Development Clinical Best Practice Guidelines’, which are guided by social and environmental determinants of health. Strengthening community action involves the
accountability of the community members and a collective effort to improve their quality of health (WHO, 1986). The fourth action goal area, reorienting health services for this research occurred by taking a youth perspective to demonstrate health literacy to better meet their needs and support a healthy life, thus shaping future generations (Schwartz & Filipov, 2018). Reorienting services also considers the well being of the individual through encouragement and engagement in health resources and creating awareness on the social determinants of health (Reading & Halseth, 2013). Examples include educating youth on topics that model a positive and well-balanced lifestyle. Significant data deficiencies exist when evaluating on-reserve health success within public health services due to the lack of epidemiological data and accessible health records, thus resulting in invalid evidence and approximations.

Public health promotion requires governance for health, as well as society acquiring the knowledge, skills, and opportunities to make healthy choices, and strong leadership and commitment at the municipal level to deliver essential health goals and priorities with communities (WHO, 1986). Public health is defined as the organized efforts and combination of programs, services and policies that protect and promote the health of all of society to keep people healthy and prevent injury, illness and premature death (Scott, 2017). In essence, health promotion is engaging in the person and their environments directly and taking an apprehensive approach to public health.

The Truth and Reconciliation Commission of Canada is another important commitment made to actively discuss advancement of Indigenous peoples health. In response to the TRC’s Calls to Action, this research specifically relates to the health
recommendation #19, which calls upon each other to consult ethically with Indigenous peoples, establish measurable goals to identify and improve health outcomes, and to publish annual progress reports and assess long-term trends (TRC, 2015). This research promotes reconciliation by holding the federal government accountable to improve on-reserve health services and develop policies and programs with First Nations that support First Nations health transformation.

Social Determinants of Health

Since health promotion has a strong emphasis on social determinants of health, it’s important to understand how Indigenous health has been affected. Where we are born, grow; live, work, and individual genetics and lifestyle choices influence health (Commission on Social Determinants of Health, 2008). According to Health Canada (2018) the main determinants of health include:

1. Income and social status
2. Employment and working conditions
3. Education and literacy
4. Childhood experiences
5. Physical environments
6. Social supports and coping skills
7. Healthy behaviours
8. Access to health services
9. Biology and genetic endowment
10. Gender
11. Culture

Additionally, a loss of social identity and land, food security, geographic location, language, and experiences of discrimination or historical trauma are recognized as the broader determinants of health for Indigenous peoples (Reading & Wein, 2009). Addressing determinants of health at all levels is an approach that can create relationships, act on health disparities and improve health outcomes (Greenwood & Leeuw, 2012; Richmond & Cook, 2016). In choosing the methods and methodology for this research study, the following definitions were utilized:

1. **Income and social status or socioeconomic status (SES)** refers to a person's rank, position or esteem in society. (WHO, 2013)

2. **Employment and working conditions** are opportunities that can influence individual and family health, and accepting working conditions that impact physical and mental health. (Mikkonen & Raphael, 2010). A major review determined high levels of unemployment and economic instability in a society causes significant mental health problems and adverse effects on the physical health of unemployed individuals, their families and their communities (Public Health Agency of Canada [PHAC], 2013).

3. **Education and literacy** is associated with increased power for change in the employment market and political landscape (WHO, 2013). Higher education increases an individual’s understanding of the world and their ability to influence the other social factors that impact their health (Mikkonen & Raphael, 2010).

4. **Childhood experiences.** “The lifelong health impacts of adverse childhood experiences are increasingly being identified, including earlier and more frequent
development of non-communicable disease” (Bellis et al., 2017). A loving, secure attachment between parents/caregivers and babies develops trust, self-esteem, emotional control and the ability to have positive relationships.

5. **Physical environments** are an important determinant of health. “At certain levels of exposure, contaminants in our air, water, food and soil can cause a variety of adverse health effects, including cancer, birth defects, respiratory illness and gastrointestinal ailments. In built environments, factors related to housing, indoor air quality, and the design of communities and transportation systems can significantly influence our physical and psychological well-being” (PHAC, 2013).

1. **Social supports and coping skills** are knowing that we are part of a community of people who love and care for us. Such social support networks could be very important in helping people solve problems and deal with adversity, as well as in maintaining a sense of control over life circumstances (PHAC, 2013).

2. **Healthy behaviours** are personal health practices and skills to prevent diseases and promote self-care, cope with challenges, and develop self-reliance, solve problems and make choices that enhance health.

3. **Access to health services** is fundamental to health. Access to health services refers to the ability to obtain services and is premised on “the strong social value of equality, defined as the distribution of services to those in need for the common good and health of all residents” (Mitura & Bollman, 2003).
4. **Biology and genetic endowment** is the basic biology and make-up of the human body. Certain individuals inherit predisposition to particular diseases or health problems, and some do not (WHO, 2013).

5. **Gender includes topics of: Roles** (the particular economic, political and social roles and responsibilities that are considered appropriate for men and women in a culture) Traditionally, women in my culture received prominent roles because we are a matrilineal society; **Equality** (the absence of discrimination); **Equity** (Being fair. Sometimes involves historical disadvantages); **Awareness** (understanding gender differences); **Sensitivity** (incorporate existing gender differences and issues, into strategies and actions); **Analysis** (identify inequalities and analyze consequences of health and well-being) (PHAC, 2013).

6. **Culture** refers to the shared values, understandings, assumptions and goals that guide the everyday life of a group. (PHAC, 2013). I believe culture tends to be valued higher among IC/FN communities and adds to the complexity of health care resources.

In summary, research that involves engaging in health literacy during youth development is an important health promotion strategy. With respect to each reserves unique history, health promotion interventions should aim to accommodate the social determinants of health and individual governance structures. Coupled with the positive impact that health promotion interventions can have on youth development, has prompted the following literature review and resulting research questions.
CHAPTER 2: LITERATURE REVIEW

A literature review was undertaken to determine what is known of IC/FN’s youth engagement in health promotion in Canada. This review focuses on all IC/FN youth, not limited by gender or place of residence (on-reserve, remote, rural or urban). The following includes a description of the literature search, and a discussion of the findings.

Search strategy. To review the current studies examining youth engagement in health promotion with IC/FN youth, an online search of CINAHL, PUBMED and PROQUEST databases was conducted. A search string of different combinations of key terms such “First Nation” OR Native OR Aboriginal OR Indigenous AND “Youth” OR Adolescent OR Adolescence AND “Health Promotion” OR Promoting Health OR Promoting Well-Being AND Canada*. Inclusion criteria for the literature search included articles addressing IC/FN youth less than nineteen years of age. Articles were limited by those published between a twenty-year period (1997-2017). Additionally, reference lists of relevant literature were searched by hand.

Results involving First Nations participants were concentrated on, however some larger studies may have included members of Inuit and Metis groups. The search resulted in a total of 197 articles. First, articles were reviewed by title, then by abstract, and finally 40 articles were read in their entirety to determine eligibility. A total of 24 articles were included in the review, as well as grey literature sources such as Health Canada, Six Nations Band Council’s website, and the First Nations Information Governance Centre.

The following section is a literature review that discusses key themes. First, I will begin with an overview of the health of IC/FN youth and health service use. Second, I
will provide an overview of what is known about youth engagement in health promotion. Third, I will discuss what is known about the ways in which Indigenous youth have been involved in health promotion research. Fourth, I will provide an overview of intervention studies that have aimed to improve IC/FN youth health and well-being are examined. Finally, I conclude with a discussion of the literature review’s gaps and limitations.

**Indigenous Youth in Canada (IC/FN) Health**

Youth are in a critical stage of life during which health knowledge, behaviours, and attitudes are formed, and present a particularly important pathway into the future of health. IC/FN youth face challenging social inequities and as result of this have five to seven years less life expectancy than non-Indigenous youth in Canada (FNIGC, 2012; Statistics Canada, 2010; Assembly of First Nations [AFN], 2011). First Nations youth living on reserves unknowingly conceive stress from intergenerational trauma produced by governmental policies such as the residential school system (Wilk, Maltby, & Cooke, 2017; Bombay et al, 2014; Kirmayer et al, 2010). Alarmingly, IC/FN youth are five to six times more likely to die by suicide, or to end up in institutions (AFN, 2011; FNIGC, 2012; Statistics Canada, 2017). For many of the youth, suicidal thoughts stem from intergenerational hurt and pain, hopelessness and a need to escape from unintentional hurt.

According to the First Nations Regional Health Survey (RHS) 2008/10, 65.4% of youth living on reserves reported their overall health as “excellent” or “very good”, although 30.0% reported being overweight and 13.0% were obese (FNIGC, 2012). According to a study by Smith, Findlay, & Crompton (2010) who found over one third of
First Nation children to be obese, further demonstrates diabetes is on the rise and affecting younger populations of IC/FN peoples. Almost one-quarter reported always eating a nutritious balanced diet, while 53.6% sometimes did and 22.7% rarely or never did (FNIGC, 2012). A study on Six Nations Reserve whose participants all reported travelling off the reserve on average three times a week, found several additional barriers that factor into healthy lifestyles such as poor walkability, safety concerns, and a lack of grocery store and fresh produce distributors (Anand et al., 2017; Joseph et al., 2012). This study also showed a “non-significant trend toward increased knowledge about health practices in children, increased leisure time physical activity (LTPA) and decreased sedentary behaviours” (Anand et al, 2017).

IC/FN youth are more likely to be early dropouts in high school, continuing the trend of lower employment and income levels (FNIGC, 2012; Statistics Canada, 2017). IC/FN mothers in Canada tend to be younger and have an increased prevalence of teenage pregnancy (RHS, 2012; Quinless, 2013; Statistics Canada, 2017). Approximately 27.9% of IC/FN youth reported to be sexually active in the RHS 2008/10 survey. A study by Devries et al. (2009) shows that the sexual behaviours of young Indigenous people living in Canada are influenced by family instability. Unstable families on reserves may parallel with the goal of the traditional nuclear family. Research studies often involve interventions geared towards addressing the assumptions of community sexual and mental health concerns versus the individuals mind, body, and spirit (Oliver et al., 2012; Steenbeek, 2004; Majumdar, Chambers, and Roberts, 2004).
In Canada, Indigenous women are seven times more likely to be victimized than non-Indigenous women (Amnesty International Canada, 2014). IC/FN female youth experience high levels of poverty, unemployment, inadequate housing, overcrowding, and poor nutrition, and are at higher risk for chronic diseases, addictions, and psychological distress (FNIGC, 2012; Statistics Canada, 2015; MacDonald & Wilson, 2016). As health disparities continue to exist between Indigenous youth and non-Indigenous youth, understanding the underlying causes of these disparities is critical. Several lists and models exist which further illustrate the complexity of the social determinants within an Indigenous context (Greenwood and Leeuw, 2012; Woodgate et al., 2017).

Health services and programs for youth living on reserves is inadequate and does not address youth specific needs (AFN, 2017). Innovative research is beginning to express underlying health concerns such as expression of pain, thus initiating the development of a pain communication app for Indigenous children and youth whom for many reasons delay seeking health care until when in pain or crisis (Latimer et al, 2013). Living on a reserve further complicates accessing health support as health services are time constraining and transportation is a barrier. Studies also found that Indigenous women are concerned with confidentiality and relationships with health care providers, which limits interaction in health care settings (Morgan & Wabie, 2012). This is especially prevalent on reserves, where confidentiality is dynamically complex due to the close-knit setting of the community.

It is well documented that Indigenous youth in Canada face poorer health outcomes than non-Indigenous youth in Canada. IC/FN youth in Canada particularly
struggle to navigate adolescence, and consequently colonization questions their sense of belonging. With the rapidly growing rate of the Indigenous population in Canada, which is under the age of twenty-five, I believe health research with the younger population will propel positive health outcomes. Therefore, interventions to improve health outcomes must include a balanced approach with respect to the body, mind, and spirit.

Incorporating such improvements to health care access and service delivery is a focal point on maintaining confidentiality and building positive relationships.

**Engagement in Health**

Indigenous youth are oppressed in the health care system due to many plausible explanations such the overarching Indian Act Policy. Traditionally, First Nations youth engaged in health conversations and observations by learning and adapting to new roles and responsibilities throughout each life stage. In contrast, a study by Blanchet-Cohen et al. (2011) displayed Indigenous youth as having minimal engagement in seeking health for themselves due to “its inability to address the scope and magnitude of the health issues they experience”. The literature also suggests that youth living on reserves experience a sense of survival mode, overshadowing the maintenance of a healthy lifestyle (Chandler & Lalonde, 2008). Indicating communication as a key to building relationships between health providers and youth, and endorse future healthcare.

Indigenous youth remain driven to search for ways to tackle the complexity of health issues as a result of personal experiences that deeply affected them, such as suicide. Youth engagement in health is heavily impacted by “negative circumstances, unhealthy lifestyles, negative past experiences, limited basic life skills, and limited
health-related education” (June et al., 2015). Blanchet-Cohen and colleagues (2011) recommend supporting youth through promoting engagement with strength-based approaches, by being adaptive to lived realities and youth driven in their needs and perspectives, while challenging standard practices. Indigenous youth specifically value culture and seek input in youth specific programs and services (June et al., 2015). Literacy pertaining to the social determinants of health plays an important role in enabling one’s ability to obtain and use health care. Ultimately, a balanced approach with respect to an individual’s self, mind, body, and spirit influences youth’s engagement in health services.

Indigenous people in Canada, in general are an underserved group. Despite recent improvements there is still a trend in reports related to low health care utilization of health services and physician visits (NCAAH, 2011). In addition, youth described barriers to health engagement including the financial constraints of services, location of services, time pertaining, service availability, issues with transportation and complex structures (OFIFC, 2017). Indigenous youth are engaged in providing their perspective and according to this review often align their interest in reorienting services and community action. Past research involving First Nations people actively discuss how this can be done by building on the unique contributions of established organizations and engaging in respectful relationships with key stakeholders (Anand et al., 2007; Fletcher & Mullet, 2016). Creating community youth health hubs has shown to be an effective engagement strategy, and is well recognized for further investments and partnerships (First Nations Health Council, 2011).
Health Promotion Interventions

With varying levels of success there has been a wide range of health promotion approaches and interventions that have been researched in Canada in an attempt to improve Indigenous youth health. A study that took place on Wikwemikong Unceded Indian Reserve in Ontario, evaluated a therapeutic intervention titled “Outdoor Adventure Leadership Experience (OALE) on the resilience and well-being of youth in the community (Ritchie et al., 2014). Results showed a short-term improvement in resilience and mental health, however resilience reverted to pre-workshop results after one year of completing the OALE program (Ritchie et al., 2014). However, due to small sample size available in analysis, the study was unable to detect any significant improvements in health outcomes.

In a study by Fletcher and Mullet (2016) youth and elders participated in a photovoice workshop to engage in community connection, family histories and healthy lifestyles. The study found that the adapted health promotion tool was beneficial in meeting the needs of Indigenous youth, and that the process itself is an intervention that effectively engaged Indigenous youth and elder interactions towards improving health (Fletcher & Mullet, 2016). A further study evaluated the effectiveness of a strength-based creative arts program developed for Indigenous youth found that the workshop to be culturally relevant and meaningful because it was based on values and traditions of the participants (Fanian, et al., 2015). Researchers, Jacono & Jacono (2008) were innovative in introducing the use of puppetry for health promotion and suicide prevention. This initiative aimed to combine Indigenous knowledge with mainstream science when
developing mental health promotion strategies for youth living on a reserve (Jacono & Jacono, 2008).

An on reserve family-based study comparing the effect of a household-based lifestyle intervention versus usual care showed that the combination of regular home visits with trained Aboriginal counsellors assessing and setting dietary and physical goals reduced the consumption of fats, oils, and sweets (p = 0.0006) (Anand et al., 2007). Another study demonstrated that the provision of intensive lifestyle interventions for Indigenous youth with type 2-diabetes led to improved health and illness management (Huynh et al., 2015). Peer-led initiatives promoting health on topics such as diabetes and infections were most beneficial (Wilson, et al. 2016; Crooks et al; 2017; Majumdar, Chambers, & Roberts, 2004). For example, in the study by Flicker et al., (2013) arts-based workshops were developed and facilitated by local youth to create HIV discussions, with communities, which led to increased interest of health relationship, empowerment, and culture sensitivity.

In summary, numerous studies have demonstrated improved youth participation, and improved health behaviours when interventions were designed and implemented through successful engagement with youth in the communities. Above all, successful health promotion programs for IC/FN youth requires a long-term commitment, initiation of data collection methods, evidence-based interventions, rigorous management, partnerships, communication, and resourcefulness from all levels of health organisations.
IC/FN involvement in Health Research

IC/FN people living in Canada have traditionally been the subjects of research. Given the age range of youth and the setting in the present study (13-15 years), it is important to note that no study solely focused on the meaning of health among Six Nations youth. Youth are held accountable to simply their words rather than exploring their true emotions and feelings in research, as communication barriers such as language still exists on reserves in Canada. Topics such as culture and mental health are dominant in the available literature involving Indigenous youth. A majority of the mentioned studies relied on self-reported health, multicomponent interventions, and highlight insights of health professionals, care providers, and stakeholder’s opinions over those of the youth (June et al., 2015; Ritchie et al., 2014).

The advantages of involving Indigenous youth in research have created many windows of opportunity to make long-term health improvements and goals. Qualitative research designs dominate in this literature review, including one evaluating the effectiveness of an intervention designed for Aboriginal adolescents (Ritchie et al., 2014). Methodologies, such as community based-participatory research (CBPR) has been “particularly instrumental in integrating Indigenous and Western ways of knowing, as the process itself embraces the existence of multiple truths and subjectivity of participants experiences” (Hyett, Marjerrison, & Gabel, 2018). Furthermore, the intent of CBPR is to produce rich detail of the participants’ experiences, however studies in this literature review did not reliably describe youth’s experience or contributions throughout the entire research process. Additionally, studies under-reported methodologies, poorly described
recruitment measures and participant characteristics, nor reflected on the researchers and participants relationships. However, some of these deficiencies may be due to publishing constraints. Despite this, however, findings and themes are similarly presented across articles, suggesting there are similarities yet distinct experiences and differences across Indigenous groups in Canada.

Research has shown how positive health outcomes depend on the development of youth health-related literacy programs. Youth-focused research led by youth themselves and their providers are more likely to receive response, thus lead to useful data for the already marginalized population (Blanchet-Cohen et al., 2011). Youth involvement in research has led to a recent shift in understanding and responding to health issues and behaviours. This literature review also demonstrates that historically Indigenous youth in Canada have been excluded from participating in research. Only the most recent health research studies are beginning to explore Indigenous youth’s perceptions of health. Today, Indigenous youth are gaining knowledge, experiencing opportunities in health research, and most importantly developing their own health agendas and gaining skills to achieve health goals.

Gaps in the Literature

This review has highlighted several suggestions to address the perspectives of Indigenous youth under the age of sixteen in research, and understand their knowledge of health and how their health concerns are addressed. No study to date has focused solely on female youth voices using health promotion methods to determine knowledge of health behaviours, attitudes, and practices. The exact contribution of data by Indigenous
youth is not specified in any of the studies, so it is unclear to what extent results reflect their unique perspectives. Additionally, the reserve experience of health services is largely unknown and limited, with no studies describing perspectives or experiences of youth living on Six Nations. Furthermore, Indigenous youth living on reserves in Canada struggle to navigate adolescence, and consequently colonization urges for the revitalization of Indigenous knowledge.

Current health promoting services and programs are heavily rooted in the provinces and territories of Canada, thus not meeting the needs of federally recognized Indigenous peoples living on reserves. Having an understanding on how to promote Indigenous youth’s health with culture may seriously impact fifty percent of the Indigenous population in Canada who are under the age of twenty-five. The reviewed literature demonstrates that studies to date are shifting research paradigms in paying attention to the perspectives of Indigenous youth. The lack of literature pertaining to Indigenous youth makes for the concerted effort to address the individual, family, and community-level youth concerns, and utilizing strengths to improve health literacy and programming. Research is an emerging avenue for Indigenous people to contribute, build on and improve livelihood on reserves. To delve into this gap, I proposed to conduct a health promotion research workshop as a health literacy method to engage youth and their understanding of health promotion. I recognize the intersecting determinants of health for specific Indigenous groups and use this variable to address current health behaviours, while enhancing opportunity for taking preventive and health promoting action.
**Research Questions**

My lived experiences coupled with health promotion and public health approaches provide the basis for my research questions:

1. How do female youth living on Six Nations Reserve No. 40 understand and engage in health promotion?
2. In what ways did a cornhusk doll workshop engage and strengthen female youth understanding on the topic of health promotion?
3. What resources are necessary for female youth to successfully engage in health promotion?

These research questions are geared to create purposeful health conversations and gauge the impact of health promotion. This in turn will identify advances in health promotion that can be achieved with youth, and simulating further health action with communities of the rapidly growing population.

**CHAPTER 3: STUDY DESIGN**

When minimal institutional knowledge of a people is present, qualitative research is a respectful necessity to gain insight and knowledge of social and cultural dynamics impacting health. Qualitative research aims to engage in the understanding of how people think about the world, and extends beyond individual experiences to explore interactions and processes within an environment (Bassil & Zabkiewicz, 2014). As demonstrated in the literature review previously, little has been explored in the literature related to how IC/FN female youth engage in health promotion within Canada. Research with First
Nations people is an underused resource as a result of historical context and traditional federal policies such as the Indian Act. Additionally, marginalized populations such as IC/FN people require researchers to consider the vast amount of variables in order to promote engagement in health care.

This study employs a community-engaged approach that draws on qualitative methods to critically explore Indigenous female youth engagement in health promotion. In this chapter, I will begin with a discussion of the qualitative methodology and methods, data collection and analysis employed in this study. This is followed by a discussion on ethics, highlighting community engagement strategies in accordance with the Tri-Council Policy Statement (TCPS2) Chapter 9: Research Involving the First Nations, Inuit, and Metis peoples of Canada. Next, I discuss research participants, sample size, recruitment methods and setting followed by a description of the data collection and analysis process.

**Methodology**

In order to influence health practices that have implications for health promotion action leading to the provision of more culturally appropriate services, the aim of this study is to understand how female youth living on Six Nations Reserve engage in health promotion. Using a cornhusk doll workshop format as a research method, the workshop presents health literacy related to culture, and is designed to explore the research questions to produce rigorous, reliable and valid data within sectors of health promotion (Wakkary, 2007). This method which is in line with a community engaged approach allows for co-operative inquiry by engaging in the community through a transformative
research process that requires participation, action, and reflection (Heron & Reason, 1996).

A community engaged research approach acknowledges Indigenous ways of knowing focusing on health, traditions, beliefs, and values that enable healthy respectful relationships and connection to land. Community engagement is the “understanding, skills, and sensitivity to apply and adapt the science in ways that fit the community of interest” (Centers for Disease Control and Prevention [CDC], 2011). This study is framed from the perspective that “engagement acknowledges peoples expertise on their own lived realities, and allows them to take part in and influence processes, decisions, and activities that will affect their health and that of the community in which they live” (Blanchet-Cohen, McMillan, & Greenwood, 2011).

As the primary researcher engaged in this project, the following resources in Six Nations were provided throughout the research process to validate the usefulness and direction of my project:

- Loretta Betty Martin, my grandmother who reminded me that Flint Corn is a simple way to connect and provides comfort for my family.

- Louise Hill, is my favorite school principal and during a discussion about my project she stressed the importance of relationships. She talked of the three sisters (corn, beans and squash) which is an example of a strong relationship and not familial.

- Scott Hill at Hill’s Lyed Corn provided rich conversations and shared his knowledge and scientific statistics of his family’s corn. Scott expressed corn as a medicine for our
bodies, and the connection we have to our ancestors through the seeds that have been passed down.

- Lois Bomberry is a registered nurse and manager of the Six Nations Family Health Team. She provided ethical advice and made suggestions for the survey questionnaire in this research study.

- Dallas Squire is currently the Mohawk keynote at Kanata Village in Brantford, Ontario. He is a respected role model and lacrosse enthusiast. He talked about building and earning trust through the small things when working with youth. Such as learning about their families, the environments they’re living in, and finding out what works best for them. There is a big fear around confidentiality with youth and tangible evidence on the relationship building required by health care providers and program developers. The cornhusk doll is representative of everything, and how we all have to find our own path while overcoming an internal battle that we are born with.

- Dr. Rick Hill recently retired from the Six Nations Polytechnic Indigenous Knowledge Center and currently works on curriculum development. Rick expressed the importance of food and our relationship to food as a key element of good health.

- Tom Deer is an Indigenous Knowledge Guardian and language educator at Six Nations Polytechnic. He provided me with the teachings of the ‘Three Sisters Wampum’, which I shared in the workshop to educate participants on belonging (roles and responsibilities) and relationships.
- Six Nations health services sexual health nurse expressed the importance of education on sexual health concerns in the youth community, and provided me with pamphlets and brochures.

- The Six Nations Dental Hygienist suggested educating youth on the importance of healthy oral care, regular check ups, and offered toothbrushes, toothpaste, floss, and brochures.

- New Directions Group suggested teachings of the ‘Good Mind’ and gave me pamphlets and brochures on drugs and alcohol resources for participants.

- Elizabeth (Betts) Doxtater, cornhusk artist and author of Art of Peace and Dreamfast. Betts quickly became the most relied upon resource as she provided support, her personal insight, professional background in social work and education, mentorship, cornhusk doll materials, the location of the workshop, and essentially her time and patience.

- Dr. Fran Scott the McMaster Master of Public Health program director guided me in promoting and protecting public health.

  Six Nations community members, knowledge holders/guardians, and youth themselves were approached at every stage of the research process to ensure the proposed work would be conducted in an ethical and culturally sensitive way that would directly benefit Indigenous populations. Academically, I was supported throughout my research journey by my supervisor Dr. Chelsea Gabel and committee members Dr. Saara Greene and Danielle Soucy. Successful facilitation of this research study required extensive
planning and support of the above-mentioned resources. Nya:wen ko:wa (thank you all very much).

Community-engaged research that facilitates health practice and effective health engagement has shown a positive association in improving health outcomes and processes (Cyril et al., 2018; Boaz et al., 2015). The design and implementation of a health promotion workshop as a qualitative method for this study was developed in a culturally appropriate way to address Six Nations female youth health needs according to community input and the previously mentioned literature review. Cultural knowledge that helped guide this research is based upon Iroquois Corn teachings and practices, as the term ‘Iroquois’ represents the six distinct nations of six distinct people. Additionally, a framework for respectfully teaching about cultures by Carol Cornelius’ book titled: *Iroquois Corn in a Culture-Based Curriculum* (1999) was used in reference to supporting the thematic focus of the health promotion workshop. A more detailed description of the workshop is provided in methods.

Youth peer-led health promotion in Canada has become a popular way of sharing health information, and is well suited to this study population (Blanchet-Cohen et al., 2011). I, the researcher and co-facilitator of the cornhusk doll workshop may be looked at as a peer to these young women and have gone through similar on-reserve life experiences, and recognize differences and similarities and understand how data analysis may be influenced. Throughout the duration of this study, I utilized reflexive journaling that drew on the similarities and differences between the participants and myself as suggested in the literature (Wright et al., 2016).
Methods

To gauge literacy of health promotion, Six Nations female youth completed identical pre and post workshop anonymous questionnaires. Comprehending health literacy is fundamental in considering many health practices and behaviours during adolescence. The questionnaire was developed with community collaboration and guidance of the Health Literacy Assessment Scale for Adolescents (HAS-A) created by Manganello and colleagues (2015). The second method was a Cornhusk Doll Workshop. The workshop is a qualitative, arts-based method used to gain and disseminate knowledge, where the participants acquired new knowledge, and performed innovative and creative problem-solving in relation to health promotion (Ørngreen & Levinsen, 2017).

The following are examples of slides in the cornhusk doll workshop.

**Title Slide**
During this time I reiterated the purpose, objectives, and goals of the workshop study. We discussed the importance of confidentiality and
**Agenda Slide**
The agenda provided participants with an overview of the workshop in accordance to time.

**Survey #1 Slide**
Participants were asked to complete the first anonymous open-ended survey.

**Defining Health Slide**
Here I provided a definition of health derived by a combination of Six Nations members and myself.
WHO Slide
I provided definitions of health and health promotion as set out by the WHO. Here I emphasized the relevance and responsibility of health to self-based institutional knowledge and teachings.

Part One Slide
I began the workshop by sharing the teachings of the cornhusk doll, corn, and relationship to land and food.

Snack Break Slide
Breaks were incorporated throughout the workshop as a stress reduction strategy and allowed for participants to reflect on corn and health. A snack was provided of flint corn, maple syrup and frozen berries. Participants were also encouraged to move about during this time.
**Corn Slide**
A physical description of corn and several ways it is integrated into daily lives for example farm feed, gas, paint, and oils. A brief history of corn was also provided.

**Corn, Beans, and Squash Slide**
A description of how corn, beans, and squash were planted together in mounds. The teachings serve as basis for relationships and the three sisters wampum teaching.

**Corn is Our Sustenance Slide**
The nutritional scientific value of white corn was described to participants as a traditional medicine.
Ceremonies Slide
This slide shows the ceremonies in a counter clockwise direction. The ceremonies are based off the moons and this protocol is still practiced today.

Part Two Slide
The second part of the workshop consisted of teachings of the Good Mind, Maslows’ Hierarchy, Determinants of Health, physical and daily nutrition, brain development, healthy habits and sleep, health services in Six Nations, immunizations, and doctor visit tips.

Woman Slide
Here I described women in my culture through roles and responsibilities. I referenced the creation story, the Great Law, and women’s relationship to...
A sharing circle was the third, Indigenous research method utilized for this qualitative study. The sharing circle provided participants with an opportunity to reflect on self, and engagement in community health promotion. Participants sat facing each other in a circle to retain a sense of power balance between the researcher, participants, and co-facilitator. The circle is a framework to life in that it has no beginning and no end, and provides an opportunity for all to connect spiritually.

**Ethics Approval**

Ethics approval was obtained for this study through Hamilton Integrated Research and the Six Nations Ethics Committee. The Tri-Council Policy Statement in Chapter 9: Research involving the First Nations, Inuit and Metis Peoples of Canada (CIHR et al., 2014), stipulates 22 guidelines specific to conducting research with Indigenous people in Canada. Details as to how each of the first 18 guidelines in chapter 9 of the TSPC2 have been considered and implemented in this study will now be discussed.

9. (1) The Requirement of Community Engagement: I consulted with the above mentioned community members & organizations in Six Nations, whom all approved and contributed throughout the research process. A letter was submitted to Six Nations Ethics Committee outlining my engagement steps and plan to conduct research with youth in my community prior to applying for Institutional ethics approval.

9. (2) Nature and Extent of Community Engagement: myself the researcher and the community members consulted determined this jointly.


9. (5) Complex Authority Structures: Six Nations Ethics application requires institution ethics approval upon submitting research proposal.

9. (6) Recognize diverse interests within the community: The researcher ensured safety of vulnerable individuals, by taking special measures to reach those most vulnerable to ensure they are included in the study. Efforts were made to involve anyone interested by having multiple sites for recruitment via advertisement posters & as well my participation in community events. I met with youth and their parent/guardian at an agreed upon location on Six Nations to obtain consent prior to participating in the workshop.

9. (7) Critical inquiry: I made every effort to ensure the study is conducted ethically and in a culturally sensitive manner.

9. (8) Respect for Community Customs and Codes of Practice: All members of this study are Six Nations members, excluding the academic team that supports the researcher.

9. (9) Institutional Research Ethics Review Required: HiREB ethics approval received and submitted with research application to Six Nations Ethics Committee.
9. (10) Requirement to Advise the REB on a plan for Community Engagement: A letter of engagement was emailed to Six Nations Ethics Committee prior to applying to HiREB.

9. (11) Research agreements: Agreements took place between the researcher and community organizations in regards to placement of recruitment posters & attendance at community events for the purpose of recruitment.

9. (12) Collaborative Research: Six Nations members and organizations were offered collaboration with this project and approved the proposed research question and design.

9. (13) Mutual Benefits in Research: Research was well supported and highly relevant to community needs and priorities, and directly benefits the participants.

9. (14) Strengthening Research Capacity: The researcher supported research capacity building through enhancement of skills in research methods, ethical review and oversight with participants and workshop co-facilitator.

9. (15) Recognition of the Role of Elders and other knowledge holders: Knowledge holders, keepers and guardians were approached and involved in this study.

9. (16) Privacy and Confidentiality: Participants were continuously informed of confidentiality before, throughout, and following the workshop. All data will be shared anonymously with all identifying information removed.
9. (17) Interpretation and Dissemination of Research Results: Participants were offered to participate in a follow up sharing circle and phone call to ensure data was interpreted accurately. Further engagement within Six Nations organizations will be completed following the final report of this study.


Participants

Participants were to be between the ages of thirteen and fifteen years old at the time of study. This age range was selected as Indigenous youth are among the most vulnerable group to start selecting health behaviours independently. Participants received a $20.00 cash honorarium for participating in the workshop. All materials for the workshop were provided. Snacks, a traditional lunch and water were also provided at the workshop.

Sample Size

Ten voluntary female youth research participants who live in Six Nations were recruited for this study. A sample size of ten participants is a feasible number in terms of cost, resources needed, etc. Additionally, in considering that participants will be female, Indigenous, and minors under the age of 15, participating in a small group setting will allow for youth to support one another.
Recruitment

Multiple sites were considered for recruitment through advertisements in locations where youth are likely to gather in Six Nations such as the Dajoh Youth and Elder Centre, throughout Elected Band Council buildings, as well as privately owned businesses located on Six Nations Reserve No. 40. Participants contacted the researcher by email or telephone, and were screened to ensure they met inclusion criteria, which included: (1) Self identified Six Nations female youth; (2) between the ages of thirteen and fifteen; (3) must live on Six Nations Reserve No. 40; and (4) parental consent to participate in the study.

Throughout the recruitment process, there were many discussions about the research direction, shared values and outcomes with youth in Six Nations. All participants were accompanied by a parent/guardian when informed of the study via a letter of information and workshop brochure. Participants were required to provide a signed parental consent and assent form prior to participating in the research. All participants were asked to inform others about the study to create awareness about the opportunity to participate in the research.

Setting

This study took place at Everything Cornhusk located in the Iroquois Village Plaza in Six Nations. The location is neutral as it is located within the village of Ohsweken. Everything Cornhusk is a safe learning space and educational resource in Six
Nations for traditional stories and values, along with a collection of cultural pieces of artwork such as the Creation Story.

**Data Collection**

The researcher facilitated a one-day cornhusk doll workshop with cornhusk artist Elizabeth Doxtater. The cornhusk doll workshop was facilitated to support a balanced lifestyle, while helping to strengthen ties to traditional cultural practices and to promote health with culture. During the workshop, participants were first asked to complete a questionnaire to gauge literacy of health promotion. Two identical questionnaires were utilized, one prior to facilitation of the cornhusk doll workshop and the second upon completion of the cornhusk doll. The cornhusk doll itself is simply a tool that allows for engagement with youth while promoting sensitive health topics such as a combination of culture, sexual health education, and corn teachings. I believe the cornhusk doll serves as a role model for female youth. Building the cornhusk doll reminds us that health is a balance of internal and external validation or forces. That health is the “well-being of the whole community in which each individual is able to achieve their full potential as a human being thereby bringing about the total well-being of their community” (National Aboriginal Health Strategy, 1989). The cornhusk reminds us of our relationship to land, and the personification of the dolls teaches us Kaⁿnikonhri:yo (the good mind). This method allowed for observation tactics such as expression of spirituality and communication skills. The workshop concluded with a sharing circle, which allowed for participants to reflect on self, the workshop, and their engagement in health promotion in the community.
Data Analysis

Data from the sharing circle and survey responses were transcribed and uploaded onto NVIVO 11 Plus. Thematic analysis “is a method for identifying, analyzing, and reporting patterns (themes) within data” (Braun and Clarke, 2006: 79; Bassil & Zabkiewicz, 2014). Braun & Clarke (2006) provide a framework that uses six steps to analyze data. The first step is to become familiar with the data. For this step, I deciphered the transcripts of both surveys and the sharing circle to identify themes that were relevant to my research questions, WHO’s Health Promotion Framework, and the TRC’s health related calls to action. A list of relevant themes included communication, food, roles and responsibilities, balance, literacy, system, navigation, spirituality, family dynamics, time restraints, self, problem solving, identity, participation, power balance, respectful conversations, and knowledge translation. A summary of the broader themes in the responses and surveys were reviewed with member checking, by returning to participants and asking for feedback and providing an opportunity to explore themes. The second step is to extensively read through themes and create initial codes. Coding condenses data through the creation of categories and concepts derived from the data. Coding facilitates the organization, retrieval and interpretation of data and leads to conclusions on the basis of that interpretation. To do this step I created theme nodes on NVIVO and collected all relevant sources. Nodes are symbolic of themes, topics, concepts, ideas, opinions, or experiences. The third step is to find key words that captioned the theme nodes that were evident from the data. Theme nodes represent topics found in the sources coded. Themes included barriers to health access, communication, culture, state of knowledge, self, stress
and relationships. In the forth step, I analyzed the themes with emphasis on the data. In NVIVO, I ran queries such as a word frequency query, coding query, and text search query, to confirm themes are well supported. In the fifth step, I defined the themes. For this step I defined three themes and elaborated on what I believed the data expressed. I continuously practiced reflexivity throughout each step one to five, reflecting with a reflexive journal noting my own biases, beliefs, and assumptions that may influence the results demonstrating its epistemological integrity. The sixth step, I reported and discussed themes. The following chapter will be a discussion regarding those specific themes.

**Chapter 4: Endview**

Ten female youth gathered to take part in the cornhusk doll workshop at Everything Cornhusk in the village of Ohsweken. Participants were between the ages of thirteen and fifteen years (n= 13.8), and are a member of one of the six nations residing in Grand River Territory. Six of the participants were of the Mohawk Nation, two Cayuga Nation, one Seneca Nation and one Tuscarora Nation. All ten participants lived on the reserve. Three participants attend high school off reserve, and seven were completing elementary school on the reserve. All participants were capable of communicating in the English language. The workshop initiated innovative health conversations and identified advances in health sectors that can be achieved through youth. I will discuss the following three themes that emerged from the data: (1) Healthy Development; (2) Healthy Relationships; and (3) Healthy Policies.
Healthy Development

Healthy development is central to the well-being of IC/FN youth as it contributes to progress and stability, these healthy trends result in resourcefulness and production of longevity. It is a process comprised of health promotion, self, and regulatory systems such as the brain that result in human behaviours. Health promotion enables youth to increase control over their health and motivates them to achieve internal and external happiness. Female youth discussed health promotion at the individual, family, and community sectors. When asked how health promotion is understood, examples of responses included:

When you teach people different ways to improve health. Social, environmental, economic, among other things will have an impact on your mental and physical well-being. It’s not just about being fat or skinny. Staying in a healthy environment and taking good care of myself.

Literacy and engagement are significant to promoting health with female youth living on reserve. Health literacy is having individual and systemic knowledge and resources to make healthy decisions while health engagement requires development, knowledge, and sensitivity to innovate and adapt Western science in ways that fit the individual and community. Data describes health as:

Health is defining if you have mental and physical well-being. Your mental health basically determines your physical health. My health is pretty healthy. I'm active, I play sports. Health is internal/external shape of our own being. Health is eating healthy foods and when your sick you have to take care of your body.

The data illustrated that female youth are more likely to promote health through engagement with parents, school, home, going to someone familiar, and the internet and
only once a doctor was noted as a source for promoting health. When asked the question:

Where do you go to promote your health in the community, data noted:

No where, I don't leave my house.
I go talk to my mom or grandma.
I don't know where to go.
I barely have questions about my health.

Self-care, self-esteem, and self-identity are essential to achieving healthy development and enhancing quality of life. According to the Health Promotion Framework, “self-care is the decisions taken and the practices adopted by an individual specifically for the preservation of health” (WHO, 1986). Encouraging self-care means encouraging healthy choices. The public sector is engaged with individuals to care for self, to come together for mutual support, and to change the circumstances and surroundings, which act as barriers to the achievement of health. Self-esteem is the way you perceive yourself, and can be built by health literacy. Self-identity is composed of morals, values and beliefs. When it comes to health, the historical context is influential to greater health. To know where we are going, we must know where we come from. When asked the questions regarding self, data responses included:

Depends on what you believe in because there are different traditions.
Health is connected to my beliefs because there are traditions in it and food that we used to follow to keep us healthy.
My beliefs are connected to my health by listening to my body and mind, and believing in the medicines that will help me be healthy.
Depending on what you believe in, each culture has its own ways to improve or help your health.
I believe in the creator and that he put us here for a purpose and a reason.
I believe that people should all be treated equally and that everybody should get most or the same opportunities when it comes to self-care.
The importance of the mind, body, and spirit in healthy youth development is a dominant force in its relationship to self-sufficiency. A healthy mind is central to all health outcomes. Youth brain development continues to mature until the mid to late twenties (Johnson et al., 2009). One of the last areas to mature the prefrontal cortex is the area responsible for planning, prioritizing, and controlling impulses. The brain is shaped by individual experiences and interactions with the environment. In regard to the mind, data expressed:

I know I have to have a good mind to be healthy.
Being good and having a good mind.
It is most important to be in the right state of mind, do not think about bad things about other people or about harming yourself, or others.
Health is the well-being of one’s body and mind.

Like the brain, healthy development is integral to a balanced well-being at all stages of life. Growing up I learned the ancestral teachings of the good mind and through the facilitation of this workshop I can acknowledge the correlation of those teachings to the science of the brain. Having a well-developed internal locus of control tends to result in strong identity and independence that can help the connection between actions and consequences (Wallston, 1992). Beyond adaptation, data describes healthy development requires cultural competence and the presence of spirituality and connection to self, family, and community. Female youth have developed a sense of understanding in how health is validated both internally and externally.

Living in a matrilineal community promotes women as carriers of seeds along with the forces of Mother Nature to reproduce. Experiencing motherhood created balance resulting in harmony as a woman in my community. Health promotion tools such as this
workshop provide an opportunity to literate female youth on sensitive topics such as self and the broader determinants of health. I believe developing health literacy opportunities with a good mind will enhance health outcomes for the next seven generations, cementing future leaders of health.

**Healthy Relationships**

Families and communities establish the architecture in developing female youth through experiences, of positive and negative interactions. Healthy relationship principles of respect, equality, trust and safety provide youth with a sense of security, stability, value, belonging, and resiliency. Learning essential relationships skills such as the importance of developing verbal and non-verbal communication skills may promote positive relationships. I believe female youth need role models in all environments to learn skills of how to be in healthy and in respectful relationships. Participants noted:

I learn about my health/health issues in school, like when they do some kind of presentation.
My mom tells me and helps me eat healthier foods.
I usually Google to answer my questions but I also have a teacher in my school I can ask.
I would ask my mom or dad and if they don’t know they would ask my family doctor.
I can find information at health services, clinics, etc.
Go to people close to you and doctors.
You can ask a friend, teacher, and parent or simply search it on the internet or read a book in the library about it.

A sense of belonging in families and communities can easily be lost for young people as youth are beginning to seek support and independently navigate the health system. A sense of unhealthy relationships was demonstrated by participants:

Because it's not comfortable. Not helpful
I usually am too busy to go.
Some other people need help.
I don't because we don't have much health care in our community
I am often to busy or unable to seek out
I don't seek out questions when there not so important and when I don't really need them answered.
I don't have questions about health. We learned enough about it in school.

There was a lack of positive relationships with health professionals, which certainly deters to poorer health outcomes. Youth develop an increased independence, and a purpose with a core set of values and beliefs, sexual maturity, and established cooperative and intimate relationships (Lerner & Galambos, 1998). Youth indicated a lack of respect in the health setting:

Feeling embarrassed about the questions or health issues or the answer they might give.
To busy, too insecure, too nervous.
Because they're extra and sometimes make a big deal out of nothing.
I don’t really go to the doctors unless I have a bad cold or something like that.
Because it's not comfortable.

When asked how often youth go to a health care provider to ask questions about their health, half of the participants indicated never going to ask questions, while two participants said sometimes, and three participants were not sure. From these observations, youth expressed a sense for belonging in health promoting sectors. Participants also indicated a need for positive relationships with youth friendly initiatives, programs, services, physicians, professionals, and infrastructure. Female youth living on Six Nations are actively engaging in health promotion. This includes youth that are engaged in strategies of health development that will increase accountability amongst
youth themselves. Health competence is ultimately the result of understanding how the community defines health promotion.

Spirituality is a unique contributor to healthy relationships. The human body is a gift to the spirit, and the spirit is intertwined with the physical and psychological components of health. It became evident from the workshop spirituality was present. The data generated from the workshop demonstrated that Indigenous ways of knowing are garnered through relationships based on connections.

Health is connected to my beliefs because there are traditions in and food that we used to follow to keep us healthy. My beliefs are connected to my health by listening to my body and mind, and believing in the medicines that will help me healthy. By using medicines we plant to get better and healthier. My health isn’t connected to my beliefs right now. There are traditions in our culture and the traditions are based upon thousands of years ago.

Promoting health with IC/FN female youth living on reserve provides an opportunity to incorporate a wide range of health tools that respond to the specific needs of youth, as opposed to traditional instruction. Some marginalized youth will have lifelong health literacy issues in the social, financial and self-struggles that result, therefore, professionals in all health sectors need to be engaged. A complexity of communication between health professionals and youth is language. Competence in conversations requires respectful dialogue and sensitized wording according to demographics. My experiences as a youth and health professional recognize power balance as a barrier. As an engagement tactic in the workshop, I frequently shifted power from the co-facilitator and myself to the youth. I observed increased participation during
power shifts and I hope this transpires through the youth themselves. By the end of the workshop, witnessing ten human spirits grow in one day gives me hope in promoting health with IC/FN female youth.

**Healthy Policies**

Helping youth in Six Nations make decisions that will positively affect their health for the future is a challenge. Historically, health policies are a foreign practice with western values thus, not meeting the needs of IC/FN youth living on reserves in Canada. Influencing youth’s everyday choices and making it easier for youth to make healthy choices is considered significant due to the intergenerational traumas experienced daily by individuals and communities. Traditional colonial polices such as the Indian Act and the residential school system still tarnishes the relationship between Indigenous peoples living in Canada and the Canadian health care system. There is a clear hesitancy for youth health change given the complexities of circumstances that remain evident in the federally funded reserve system of Canada. This is evident as participants noted the following:

I think the community needs to focus with this kind of knowledge and focus on youth by themselves. And their health, they should be focusing on the younger generation. All you here about are elders and adults, or babies and children. From 0-12, and 50 and older. Were not important, and I don’t feel important or like there is anything for me here.

Through community resource utilization and participation, Six Nations Reserve serves as an innovative community when it comes to health transformation in on reserve communities of Ontario. Supporting youth-friendly environments through creating
healthy polices will help promote healthy development of IC/FN youth. The data suggests access and utilization of health resources in Six Nations services are abandoned due to digital life, time constraints, consent, privacy and confidentiality. Access and utilization are two examples of attempts to ensure that public policy is coordinated. For public policies to be healthy, they must be Indigenous led and respect the changing health needs of the people and community (WHO, 1986). Assigning resources and setting new priorities are a certainty in health promotion that caters to youth. I believe the health promotion approach responds effectively and ethically to the current and future health concerns of female youth living on reserve.

In my culture, a new life was given a single name that gave the spirit a purpose on Mother Earth. The name served as guidance for the human and created a sense of belonging within the community, and allowed for intergenerational connection of infant, parents and elders. Early government policy required both a first and last name. This is still evident today within the Grand River Territory as the people still carry colonial last names. The effects of this imposed policy remains un-searched and the impact is unknown. Additionally, there is no word in my language that means “adolescent” and today this is evident as adolescent mothers are respected equally to non-adolescent mothers. By doing this workshop, phenomenology leads me to believe spirited youth are still connected to land based resources and will continually struggle to navigate imposed systems such as health care.

In moving forward with health transformation, female youth were asked in what ways could your community help you stay healthy? Participants revealed the following:
A healthy community looks like where everyone is involved in making the community better it is not just one group doing all the work. This workshop has changed my understanding of health. I think my health will be better just because of this workshop. It gives me a better connection to understanding my health. Everyone was participating and working together. Our community can stay healthy by keeping a good mind and being kind. We can all get involved more and help more. Recycle more, make available healthier foods and opportunities to make friends. My community can help me by providing more health related guidance.

To have effective Indigenous youth policies that focus on health, they must be driven by Indigenous youth themselves. Healthy development influences health practices that have implications for health promotion action leading to the provision of more youth appropriate services. The study aids Six Nations female youth to understand health promotion within themselves and at a community level. Using a cornhusk doll workshop, health was promoted through health literacy related to culture, and allowed for meaningful co-operative inquiry by engaging in the community through a transformative research process that required participation, action, and reflection (Heron & Reason, 1986). The findings from this research suggest that culture based initiatives that support healthy independent Indigenous youth navigation and transition provide opportunities for youth themselves to enhance their health and sense of belonging within the community. Participation was key in understanding and promoting health with youth. Exploring Indigenous approaches to research such as a cornhusk doll workshop is one way for Indigenous youth to support one another. This community engaged research approach explored Indigenous ways of knowing focusing on health, traditions, beliefs, and values that enable respectful relationships and connection to land. Six Nations female youth
recognize health promotion requires healthy development, healthy relationships, and healthy policies that affect their health and that of the community in which they live.

**Female Youth Health Recommendations**

The following recommendations are consistent with the Ottawa Charter for Health Promotion's directives to coordinate healthy public policy, develop personal skills, and create supportive environments (WHO, 1986). In response to the health challenges of female youth, these strategies will be the focal point for the following three recommendations:

The first recommendation suggests investing in building healthy youth public policy by engaging with youth in policies that support youth to act in ways that improve their health. An Indigenous health policy that is specific to Indigenous youth offers considerable potential and scope to meet the complex health challenges that face female youth in particular. Support for youth in Six Nations in making healthy decisions that will positively affect their health behaviours. Policies addressing intergenerational trauma, culture shock, and literacy may reduce stress amongst youth in the community. Six Nations female youth bring strengths to the community, and are lifelong advocates for health and political change.

The second recommendation suggests that supporting youth development and personal skills is a strategy that requires development of health literacy, healthy relationships, and promotion of community values and beliefs that provide purpose and direction. This study is an example of the opportunity of partnerships for youth to gain the
ability to draw on their families and communities, and to improve health outcomes and to continue to do more community-engaged research in this area. By becoming involved in projects such as the cornhusk doll workshop, youth developed research skills, connected with self, and explored how to promote health and participate as members of the Six Nations female youth community.

Creating supportive environments is improving the community's resources and responsiveness to youth needs. By promoting connections and supportive relationships, youth health action stands as a powerful pathway for healthy youth development. Six Nations female youth suggested the following health initiatives that they deemed useful when implementing health promotion and policy strategies:

- Youth led sports clubs
- Swimming pool
- Youth classes on healthy development
- Youth language classes.
- Life promotion skills class such as baby sitting, cooking, self care, promoting a good mind
- Workshop’s like the cornhusk doll workshop
- Youth stress management combined with painting classes
- Free community breakfast
- More things to do at the youth center
- Honorarium for participation
- Health clinic just for youth
- More health classes in school. Like once a week at school.
- More recycling options
- Growing your own medicines
- Youth trips
- Free self care items at a convenient place
- Fitness classes
Limitations

The participants for this study reside on the Six Nations Reserve. Recruitment of participants of the six distinct nations living on other reserves may have produced alternative results given the distinct differences and considering relationships to land.

Resources served as a second limitation for this study. For this reason I selected only female youth as participants to emphasize the prominence of women in my culture.

Final Reflection

Exploring health promotion through community engaged research with female youth living on Six Nations Reserve No. 40 is a vocational experience I will always remember. As a Six Nations member conducting peer-led research with Six Nations youth provided me with gratification only achievable within the community I grew up in. Gaining institutional knowledge of health and how youth on reserve address their health concerns is a step towards reconciliation and creating health action initiatives. This thesis explores the possibilities of health promotion in efforts to address health needs through literacy of youth in an effort to gain awareness and action leading to positive youth health outcomes. Going to the youth themselves created health conversations within my community fostering the next generation of women to promote health and address important health issues in my community.

To conclude my final reflection I feel it is important to share the facilitation process of creating a cornhusk doll in the workshop. Participants in the study utilized
building a cornhusk doll as an engagement tool to promoting health. Health literacy was observed and applied by the researcher during the cornhusk doll workshop. Female youth voluntarily participated in both written and oral data collection methods throughout the one-day workshop. The following is an imagery related summary of building a cornhusk doll.

**Step 1:** Selecting the husk. The optimal cornhusk is that of Flint corn. The importance of corn in culture was expressed during this step.

![Image of cornhusk steps](image)

**Step 2:** Creating the head. During this time we are reminded of Kaʔnikonhri:yö.
Step 3: Building the body. Here we are reminded that the body is connected to the mind, and that our core is where internal and external validation occurs.
**Step 4:** Braiding and weaving in the arms reminds us of the importance of balance to health.

**Step 5:** Creating the lower body reminds us of the spirit that holds us up.
Step 6: Custom hair and dresses were designed and implemented with the importance of self in mind.
References


